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The role of life events, coping style, college adjustment, and parent and peer relationship quality in predicting relational aggression in first-year college students

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The Role of Life Events, Coping Style, College Adjustment, and Parent and Peer Relationship Quality in Predicting Relational Aggression in First-year College Students

The role of positive and negative life events, coping style, and adjustment in predicting relational aggression in college students was investigated using a sample of fifty-one 17-19 year old male ($n = 16$) and female ($n = 35$) first year college students. The role of parental psychological control and perceived parent-child and peer relationship quality in predicting relational aggression was also assessed. Students who were less well-adjusted to college academically and socially, and who were less satisfied with and committed to their choice of college, used more relational aggression. Students using the coping strategies of positive reinterpretation, acceptance, and planning were shown to be less relationally aggressive. Additionally, students experiencing fewer positive life events used more relational aggression, as did students perceiving high maternal psychological control and low parent alienation. Results, implications, and directions for future research are discussed.

Earlier aggression research focused on physical and verbal aggression, with results showing that males are more aggressive than females. This research, however, neglected to take into account the nature of gender differences in aggression apparent in childhood. For nearly a decade, researchers have been aware that the aggressive behaviors exhibited by girls differ greatly both qualitatively and quantitatively from those exhibited by boys. Relational aggression, the focus of the current study, involves harming others through manipulating or damaging peer relationships (e.g. using the 'silent treatment', spreading rumors). This type of aggression has been shown to effectively target security and intimacy in interpersonal relationships and in adulthood, is used by both men and women (Crick & Grotpeter, 1995; Crick, 1996; Grotpeter & Crick, 1996). This current stud sought to extend existing research by investigating the relationship between relational aggression, coping, adjustment, parent and peer relationship quality, and life events in a college sample.

As with physical aggression, age trends in the us of relational aggression are apparent for both boys and girls. In early and middle childhood, relational aggression is used significantly more frequently by girls. These aggression levels have been found to b stable over time, indicating that children who are relationally aggressive in early childhood will likely continue to be aggressive as they mature, unless an

intervention occurs (Crick, 1996). In middle childhood and early adolescence, physical and relational aggression occur with equal frequency in male peer relationships, but relational aggression is still significantly more characteristic at this time of female relationships (Crick & Nelson, 2002). Likewise, gender differences can also be seen in victimization; girls have been found to more often be the victim of relational aggression within friendship dyads (Crick & Nelson, 2002). In adolescence, the gender gap in relational aggression narrows as the two genders begin to interact more often and boys begin to use more relational aggression in their interactions with peers of both genders (Linder, Crick, & Collins, 2002; Werner & Crick, 1999).

Relational Aggression and Adjustment

The negative effects of relational aggression on peer relationships and social adjustment are well-established. Children who use relational aggression with their peers have been shown to experience peer rejection, internalizing problems (i.e. depression, anxiety and withdrawn behavior), antisocial behavior, and lower friendship quality (Prinstein, Boergers, & Vernberg, 2001). Additionally, research has shown that relationally aggressive children and adolescents (including college students) are at a higher risk for developing eating disorders and antisocial personality characteristics, and experiencing poor relationship quality, lower levels of life satisfaction, and emotional maladjustment (Linder et al., 2002; Prinstein et al., 2001; Storch, Werner, & Storch, 2003; Werner & Crick, 1999). Alienation from peers has also been positively associated with relational aggression perpetration and victimization (Linder et al., 2002). Therefore, not only is relational aggression prevalent among children and young adults, but the effects of its use include a wide variety of negative outcomes that have been shown to be stable over time, making relational aggression a construct of empirical importance (Crick, 1996).

Parenting and Relational Aggression

Predictors of relational aggression have been shown to include a variety of parenting variables. For example, the use of relational aggression has been found to be related significantly to the aggressor's perception of the quality of the parent-child relationship. Linder, Crick, and Collins (2002) posit that individuals who use relational aggression are more likely to feel alienated from their mothers and may feel they have an enmeshed, or over-involved, relationship with their fathers. This can be explained by the importance of relationships model, which states that a parent-child relationship that is very intense and exclusive, and that involves an unhealthy closeness, may teach a child that relationships, both romantic and platonic, are also meant to be intense and exclusive. Likewise, these individuals may learn in childhood that the manipulation of these relationships is an effective way to achieve goals (e.g. Nelson & Crick, 2002). The time spent in college is often the genesis of many new friendships and romantic relationships and as such, can be seen as a test of social skills, as well as of an individual's perceptions of how one should act in interpersonal relationships. Individuals may learn inadequate social skills from their parents and when placed in a new social setting like college, will depend on these social skills and relationship scripts learned in childhood. As such, the current study aimed to extend the Linder et al. (2002) finding linking romantic relational aggression to peer and parent relationship quality, by examining links between parent relationship quality and relational aggression with peers in general.

Psychological control, or a parent's control over their child's psychological self (e.g. emotions, personal identity), is another parenting construct that has been found to be associated with aggression. It is well-established that low behavioral control and high parental psychological control, can put children at risk for using physical aggression. These constructs have also been found to be associated with withdrawn and internalizing behavior in children (Mills & Rubin, 1998). A discrepancy arises, however, when one looks at psychological control and relational aggression. Nelson and Crick (2002), in a study of children in middle childhood, and Nelson, Hart, Yang, Olsen, and Jin (2006) using a preschool sample, found that parental psychological control is associated with female relational aggression. Casas et al. (2006) discovered a similar

link between parental psychological control and relational aggression in both genders. Hart, Nelson, Robinson, Olsen and McNeilly-Choque (1998), on the other hand, did not find support for this in their sample of preschool-aged children. This discrepancy, however, could be explained by the use of different reporters for each of the studies, as well as the different ethnicities sampled. For example, the Nelson and Crick (2002) sample used a Caucasian sample based on parent report of both psychological control and child relational aggression. Nelson et al. (2006), on the other hand, used an Asian sample based on spouse-reports of psychological control and peer reports of relational aggression. Likewise, Hart et al. (1998) used a Russian sample and based their information on maternal report only. It is therefore difficult to assess the relationship between these two variables given the disparities in sampling. Not only do the ethnicities and reporters vary greatly in these samples, but none are based on self-report and none use samples older than middle childhood. Therefore, additional research is needed on psychological control as a predictor of relational aggression.

Relational Aggression in College Students

When an adolescent leaves for college, parents hope that their child will carry with them the lessons learned in childhood, yet little research has investigated the role parenting variables can play in predicting relational aggression once the child leaves home. This study contends that many of these parenting variables will remain salient after an adolescent leaves home to go to college, despite the increased physical distance, therefore continuing to influence relational aggression. Much of the research on these parenting and childhood variables, especially psychological control, has been done with children or adolescents, or has depended on maternal report. It would therefore be valuable to extend this body of research to include a college sample using self-reports of parental psychological control and peer and parent relationship quality.

Environmental stressors in combination with characteristics of the individual may also greatly impact relational aggression and students' adjustment. When students begin college, they enter a stressful environment in which they must establish themselves within a social hierarchy. Indeed, the freshman year of college can be a time of great insecurity. According to Kenny (as cited in Ainsworth, Blehar, Waters, & Wall, 1987), college can be compared to Ainsworth's Strange Situation as a time to test one's coping strategies, emotional security and ability to function well away from parents (Ainsworth et al., 1987). This added stress of entering a new environment can be threatening to self-esteem, self-confidence and general psychological health. Adolescents who have a negative self-representation, or feel that their peers have negative opinions of them, are more likely to feel inadequate in new social situations and social relationships and are more likely to exhibit higher levels of relational aggression. Likewise, relational aggression has been found to be more prevalent among girls who feel unstable in their social standing (Moretti, Holland, & McKay, 2001). In some cases, relational aggression may be used to establish a place in this social hierarchy and to gain control over peers. It has also been posited that stressful life events can mediate the relationship between the environmental context (e.g. neighborhood or dorm) and externalizing behaviors in children (Roosa et al., 2005). Likewise, greater self-reports of distress or interpersonal stress have been found to be associated with externalizing means of coping (Scott & House, 2005). Therefore, it is possible that college students may use relational aggression as a response to stressful life events and feelings of social anxiety after beginning college.

A variety of internal variables, including coping style, are also associated with college students' relational aggression. It has been shown that students who use more problem-focused or active coping (doing something positive to solve a problem, rather than focusing on or venting about it) tend to be better adjusted to college and use less relational aggression (Leong & Bonz, 1997; Podbury & Stewart, 2003). This current study used a sample of first-year college students, a group transitioning to college, in order to examine associations between coping and relational aggression. In addition, this study examined the contribution of both life events and coping in predicting relational aggression.

In summary, various discrepancies and gaps exist in the relational aggression literature. First, relatively little research has been done examining the association between relational aggression and parenting variables, including psychological control, and the research that exists has revealed contradictory findings. Additionally, research has not examined whether increased physical distance from parents attenuates or intensifies the harmful effects of psychological control. It has been suggested that aspects of the parent-child relationship (e.g. warmth, attachment, communication style) maintain salience into adulthood (e.g. Bernier, Larose, Boivin, & Soucy, 2004; Soucy & Larose, 2000). Therefore, an aim of this study was to examine whether the effects of parent-child relationship quality and parental psychological control on relational aggression will persist into the first year of college, a time in which individuals are experiencing physical distance from their parents for the first time.

Second, although the relationship between relational aggression and college adjustment is well-established (e.g. Bernier et al., 2004; Storch, Werner, & Storch, 2003; Werner & Crick, 1999), there is a lack of research on how the transition to college and its associated stressors are related to the use of relational aggression. Specifically, the current study uses a sample of first-year students in the fall of the academic year to examine the associations between life events, coping strategies, adjustment, and the use of relational aggression during this time of transition. In addition, existing research has not examined negative life events in conjunction with coping strategies. Therefore, this study also examines whether it is life events, how an individual copes with life events, or both, that predict the use of relational aggression.

Therefore, the hypotheses of this study are that 1) individuals high on parental alienation and low on parental trust and communication will use more relational aggression, 2) individuals reporting high parental psychological control will exhibit more relational aggression, 3) positive adjustment to college will be negatively associated with relational aggression, 4) experience of negative life events will be positively associated with relational aggression, whereas experience of positive life events will be negatively associated with relational aggression, 5) use of positive coping strategies will be negatively associated with relational aggression, and 6) both an individual's means of coping and their experience of negative and positive life events will contribute to the prediction of relational aggression.

Method

Participants

Participants included 51 first year college students between the ages of 17 and 19 years. Of the sample, 68 percent were female and 32 percent were male. The mean age was 18.22 years (SD = .461). All participants were students at a small liberal arts college in the Northwestern U.S. The majority of participants were caucasian. In order to obtain peer reports of relational aggression, each participant's roommate was also recruited for participation. However, due to an insufficient number of roommate reports, they were not included in the analyses.

Measures: Predictors of Relational Aggression

Parent-child relationship quality. In order to measure the security and quality of the participants' attachment to parents and peers, the widely used 25-item Inventory of Parent and Peer Attachment (IPPA; Armsden & Greensberg, 1987) was administered. High test-retest reliability has been found using this measure (Soucy & Larose, 2000). The IPPA asks respondents to report how true a statement is using a 5-point Likert scale (1 = almost always or always true, 5 = almost never or never true). Sample items include, "I tell my parents about my problems and troubles" and "My friends accept me as I am". For both the parent and peer versions of the measure, trust, communication and alienation scores were created by summing the appropriate items.

Psychological control. Additionally, parental psychological control was measured using an 8-item measure adapted by Barber (2002) from the Children's Report of Parent Behavior Inventory (Schludermann & Schludermann, 1988). Participants rate on a 3-point Likert scale how similar their mother or father is to a statement, from

1 (not like) to 3 (a lot like). The questionnaire includes items such as, "My mother/father is always trying change how I feel about things" and "My mother/father often interrupts me". Mother and father psychological control scores were created by summing the eight items and could range from 8-24. Alpha scores determined by Barber (2002) ranged between .69 and .82 for this measure depending on gender.

Adjustment to college. The Student Adaptation to College Questionnaire (SACQ, Baker & Siryk, 1984) was used to measure the participant's level of college adjustment. The SACQ has been found to have an alpha reliability level of .80 and has been used by numerous researchers (e.g. Baker & Siryk, 1984; Leong & Bonz, 1997). The 67-item SACQ measures various aspects of college student adjustment, including personal-emotional adjustment (15 items), academic adjustment (24 items) social adjustment (20 items), and school satisfaction (7 items). Each aspect is measured along a 9-point Likert scale, ranging from 1 (applies very closely to me) to 9 (doesn't apply at all to me). Adjustment scores were created by summing the items that applied to each subscale.

Positive and negative life events. Participants completed the Adolescent Perceived Events Scale (APES; Compas et al., 1987), a 100-item measure of daily and major stressful events during adolescence. Each question was rated on 9-point Likert scale, evaluating whether the event had occurred in the past four months, as well as how good or bad the event was perceived as being, from -4 (extremely bad) to +4 (extremely good). In the development of the measure, Compas et al. (1987) verified the reliability of the measure through test-retest reliability. Participants decided whether a listed event was positive or negative. The ratings of events rated as positive (scores from 1 to 4) were summed to create a subjective positive life events score. The same was done for negative life events (those rated between 0 and -4) by summing absolute values of negative ratings. Possible scores could range from 0 to 400.

Coping strategies. Additionally, participants completed the COPE Questionnaire (Carver, Scheier, & Weintraub, 1989), a 60-item measure of coping strategies. The COPE Questionnaire has been used repeatedly to measure 15 different responses to stress (e.g. Leong & Bonz, 1997). Subscales include positive reinterpretation and growth, mental disengagement, focus on and venting of emotions, use of instrumental social support, active coping, denial, religious coping, humor, behavioral disengagement, restraint, use of emotional support, substance use, acceptance, suppression of competing activities, and planning. Participants were asked to decide how often they engaged in the behavior described (e.g. "I get upset and let my emotions out") using a 4-point Likert scale ranging from 1 (I usually don't do this at all) to 4 (I usually do this a lot). For each coping subscale, a coping strategy score was created by summing the responses (1-4) for all applicable items. According to Leong and Bonz (1997), this measure has sufficient factorial and criterion validity.

Measures: Relational Aggression

Self-reported relational aggression was measured using an adaptation of the widely used measure developed by Morales and Crick (1998). This measure has been used by numerous researchers and is widely accepted as a measure of relational aggression (e.g. Crick, 1996; Grotpeter & Crick, 1996; Linder et al., 2002). The 20-item measure has been found to have a test-retest reliability level of $r = .82$ (Crick, 1996) and is based on a 7-point Likert scale rating how true a statement is, from 1 (not at all true) to 7 (very true). A relational aggression perpetration score was created by summing the 11 relational aggression perpetration items. Relational aggression scores could range from 11 to 77.

Procedure

Participants were recruited through e-mail announcements, flyers, and through verbal announcements in psychology courses. Participants enrolled in introductory psychology courses received course credit for participating. All participants were also entered into a drawing for cash prizes and gift certificates as an incentive for participating.

At scheduled data collection sessions, all participants were informed about the nature of the

study and their rights as participants. Participants then signed an informed consent form, provided demographic information and were given a packet of questionnaires that took approximately one hour to complete.

Results

Descriptive Statistics

Descriptive statistics for psychological control, adjustment and relationship quality measures can be seen in Table 1. Descriptive statistics for relational aggression, life events and coping strategies are given in Table 2. There was an adequate range of scores on each measure. Intercorrelations among the subscales of the COPE can be seen in Table 3. As can be seen from the table, several large correlations exist among subscales. Similar intercorrelations exist among adjustment and among relationship quality measures, presented in Tables 4 and 5, respectively. The intercorrelations between positive and negative life events did not reach significance. Mother and father psychological control were highly intercorrelated ($r = .45, p < .01$). Due to insufficient statistical power, separate analyses for males and females were not conducted.

Parent-Child Relationship Quality, Peer Relationship Quality, and Parental Psychological Control as Predictors of Relational Aggression

To test the hypothesis that relational aggression would be significantly related to the perceived quality of the parent-child and peer relationships, the parent and peer subscales of the IPPA were correlated with relational aggression scores. Relational aggression was found to be significantly negatively associated with parent alienation ($r = -.28, p < .05$).

To investigate the association between parental psychological control and relational aggression, mother and father psychological control were correlated with relational aggression. Mother psychological control was found to be significantly positively associated with relational aggression ($r = .34, p < .05$), whereas father psychological control was not. Correlations can be found in Table 6.

College Adjustment as a Predictor of Relational Aggression

To test the hypothesis that adjustment to college would be associated with relational aggression use, Pearson's r coefficients were computed between the academic adjustment, social adjustment, personal-emotional adjustment, and school satisfaction subscales of the SACQ and the self-report relational aggression scores. Zero order correlations are presented in Table 7. Significant negative associations were found between relational aggression and academic adjustment ($r = -.30, p < .05$), social adjustment ($r = -.39, p < .01$) and school satisfaction ($r = -.28, p < .05$). These three subscales were then entered into a multiple regression with relational aggression as the dependent variable. The model was significant, $F(3, 46) = 3.19, p < .05$, as can be seen in Table 8. When all three adjustment variables were entered into the regression, no single adjustment variable independently predicted relational aggression.

Life Events as a Predictor of Relational Aggression

To test the hypothesis that relational aggression levels would be significantly associated with stressful life events, zero order correlations were computed between positive and negative life events scores and the relational aggression scores. A significant negative correlation was found between the positive life events score and relational aggression ($r = -.35, p < .05$).

Coping as a Predictor of Relational Aggression

To test the hypothesis that coping style could predict the use of relational aggression, the fifteen subscales of the COPE questionnaire were correlated with the self-report relational aggression score. Zero order correlations are presented in Table 7. Relational aggression was found to be significantly negatively correlated with positive reinterpretation ($r = -.28, p < .05$), acceptance ($r = -.34, p < .05$), and planning ($r = -.40, p < .01$). A multiple regression was then conducted with these three subscales as predictors in order to investigate the independent contributions of each in predicting the use of relational aggression. The model was

significant, $F(3, 44) = 4.42, p < .01$, as can be seen in Table 9. Planning was marginally and negatively associated with relational aggression. No other predictors were significant.

Life Events and Coping as Concurrent Predictors of Relational Aggression

To test the hypothesis that both life events and coping matter in predicting relational aggression, positive life events and the significant coping variables of positive reinterpretation, acceptance and planning were entered into a multiple regression with relational aggression as the dependent variable. The model was significant, $F(4, 39) = 3.612, p < .05$, as can be seen in Table 10. No individual predictors were significant.

Discussion

This study looked at the relationship of coping, adjustment, stressful life events, relationship quality and psychological control to relational aggression in college students. Using a sample of first-year college students, parent-child relationship, coping, adjustment to college, psychological control and positive life events were found to be significantly related to relational aggression.

In support of the first hypothesis, a significant negative association was found between relational aggression and parent alienation. It appears that individuals who are more alienated from their parents use less relational aggression. This does not correspond with Linder, Crick, and Collins' (2002) finding linking high maternal alienation with relational aggression. However, reports of mother and father relationship quality on the IPPA were combined in the current study, which may have led to this divergent finding. Perhaps a different picture of the association between parent-child relationship quality and relational aggression appears when the parent-child relationship is viewed as a whole or as a family unit. Asking the students to combine mothers and fathers in their ratings may have led to different reports of parental alienation than would have appeared if students had reported separately for mothers and fathers. In addition, Linder and colleagues assessed relational aggression within romantic relationships only, whereas the current study examined relational aggression use with both same and opposite sex peers. It may be that mother and father relationship quality has different influences on relational aggression in romantic versus platonic relationships (i.e., friendships).

On the other hand, the current finding regarding parent alienation can also be partially explained by the importance of relationships model, which argues that relationally aggressive individuals may have learned from their parents that relationships are meant to be exclusive and intense. Individuals who have overly close, enmeshed relationships with their parents may actually feel less alienated from them, and therefore exhibit relational aggression because of this belief in the importance of intense, exclusive relationships. Further research is needed to examine whether or not the importance of relationships model can indeed be used to explain this finding.

Second, it was hypothesized that individuals reporting high parental psychological control would exhibit more relational aggression. This hypothesis was partially supported by the finding that maternal psychological control was significantly positively associated with relational aggression such that individuals reporting that their mothers were psychologically controlling used more relational aggression. The same was not found to be true, however, for father psychological control. Perhaps for college students, the mother-child relationship is more salient, explaining this contradictory finding.

In contrast to the current findings, Nelson and Crick (2002) discovered that father psychological control was related to relational aggression in young girls. However, the current sample was significantly older than the Nelson and Crick sample, and parent-child relationships can change significantly between early childhood and early adulthood. The current study's findings can be further supported by Loukas, Paulos, and Robinson's (2005) discovery that social aggression and mother psychological control were significantly associated in Latino boys between the ages of 10 and 14. Social aggression and mother psychological control were associated in girls as well, although this relationship was found to be mediated by social evaluative anxiety. That is, females with mothers who were psychologically

controlling were more likely to use relational or social aggression if they experienced social evaluative anxiety, or felt that others were judging them negatively and experienced anxiety because of that. Therefore, perhaps in college students the relationship between psychological control and relational aggression may exist within the context of the anxiety and insecurity inherent in beginning college (or any life change for that matter).

The third hypothesis was also supported: participants who were less well-adjusted to college used more relational aggression. This was found to be particularly true for academic and social adjustment such that students who were less well adjusted academically and socially used more relational aggression. They also were less satisfied with their choice of college. Personal-emotional adjustment was not found to be significantly related to relational aggression. The correlation may become significant with a larger sample with greater statistical power. However, perhaps relational aggression is less affected by personal-emotional adjustment.

Students exhibiting poor academic adjustment may use more relational aggression because they are pre-occupied with making friends and finding their place in this new social hierarchy and may not spend sufficient time studying and focusing on their academic responsibilities. That is, perhaps they have had trouble making friends in the past (possibly because of their relational aggression) and in their first semester of college they are overly concerned with making a positive impression. At the same time, these individuals continue to be relationally aggressive, perhaps explaining their poor social adjustment. Their relational aggression use may interfere with the establishment of positive friendships, leading to poor social adjustment. Likewise, it seems logical that these students may also be dissatisfied with their choice of college. Academic, social, and emotional adjustment are closely linked conceptually with school satisfaction. It therefore plausibly follows that if a student is struggling academically and is having trouble making friends and fitting in to his new social environment, this student will also be less satisfied with college in general. Therefore, this study found support for Werner and Crick's (1999) finding that relational aggression is related to a number of adjustment constructs. Likewise, this study lends further support to previous findings that individuals who are relationally aggression are at a greater risk for poor social adjustment (e.g. Crick & Grotpeter, 1995; Crick, 1996).

The fourth hypothesis, that relational aggression would be significantly related to participants' stressful life events, was also supported. First, participants reporting fewer positive life events reported more relational aggression. Negative life events scores, however, were not significantly associated with relational aggression. Items on the APES (Adolescent Perceived Events Scale) questionnaire that would typically be rated as positive tended to be interpersonal in nature, such as "helping other people," "spending time/talking with boyfriend/girlfriend," and "doing things/spending time with family members." Therefore, perhaps it is more stressful and influential to experience a lack of these positive experiences than it is to experience a number of acute, negative life events. It may be that the interpersonal nature of these positive life event items can explain their relationship to relational aggression as well. It seems logical that the types of life events most significantly affected by relational aggression would be those involving relationships with friends and family. This assumption is supported by the finding that relational aggression is more prevalent among girls who feel unstable in their social standing and who believe their peers have negative opinions of them, or in this case, individuals who are experiencing some sort of interpersonal stress (Moretti, Holland, & McKay, 2001).

Additionally, relational aggression was also found to be significantly negatively associated with the coping constructs of positive reinterpretation, planning and acceptance such that individuals who used these coping strategies exhibited less relational aggression. However, maladaptive coping strategies such as behavioral and mental disengagement and substance use were not found to be significantly related to relational aggression; active coping was also not found to be significantly associated with relational aggression. Significant relationships between relational aggression and other coping

strategies may become significant with increased statistical power.

Therefore, the use of adaptive coping strategies appears to be more important in preventing relational aggression than the use of maladaptive coping strategies is in predicting relational aggression. This finding replicates past research indicating that students who use more problem-focused or positive means of coping tend to use less relational aggression and in turn are better adjusted in college (Leong & Bonz, 1997; Podbury & Stewart, 2003).

Finally, the multiple regression model using positive life events and coping as concurrent predictors of relational aggression was found to be significant, although no one variable stood out as most predictive of relational aggression. This indicates that both positive life events and coping strategies predict relational aggression. This result could change with a larger sample, as the coping strategy of acceptance was marginally significant. However, in light of the current findings, it appears that a lack of positive life events, as well as the how one copes with this, are both important in predicting the use of relational aggression in college students. This may indicate that intervention efforts can be aimed both at increasing the number of positive life events in students' lives, as well as at improving how students cope with a lack of positive interpersonal experiences (e.g. how to cope with feelings of loneliness and isolation in the first year of college).

There are a number of limitations to this study. Perhaps the most important limitation is shared method variance. Only self-reports of all constructs were obtained; therefore, it is possible that the significant results are due to the fact that many constructs will naturally vary together because the same person is reporting on all of them. Therefore, in the future, peer reports of the measures, especially relational aggression, should be obtained. Also, this study used a very small sample of college students, thereby limiting the statistical power of the analyses. With a larger sample it would be possible to conduct analyses by gender — something lacking in the current study. Likewise, the sample was fairly homogenous, consisting mostly of Caucasian students attending a small liberal arts college in a rural community. For this reason, it may not be generalizable to a larger, more diverse sample. Finally, the study was correlational in nature and therefore, causality and direction of effects cannot be determined. It is equally possible that relational aggression leads to poor adjustment as it is that poor adjustment leads one to be relationally aggressive. For this reason, future research should use a longitudinal design to better determine directionality.

Additionally, it may be useful to extend this study by looking at social evaluative anxiety, or "fearing negative evaluation and/or avoiding being with others for any reason," as a predictor of relational aggression (Loudin, Loukas, & Robinson, 2003, p. 432). According to Loudin et al., social evaluative anxiety has been found to be predictive of relational aggression. This construct may be better than a general stress measure (such as the APES) at examining the stress and anxiety associated with adjusting to college and finding one's place in the new social hierarchy.

Finally, it would be useful to broaden this study by using a sample that includes college students of all ages, rather than only first year college students. Levels of stress experienced by first year college students, as well the coping strategies utilized, may be somewhat different compared to second, third and fourth-year students. For this reason, comparing the stress levels, coping strategies, and relational aggression levels among age groups in a college sample would be worthwhile. Additionally, significant gender differences may be seen in the use of relational aggression, the use of coping strategies, the experience of life events and students' adjustment to college. For this reason, gender differences should be examined in a larger sample. Likewise, gender may serve as a moderator between parenting variables and relational aggression. That is, perhaps a relationship only exists between parental alienation and relational aggression for females. Perhaps psychological control only predicts relational aggression for males. This could be investigated using a larger sample as well.

The results of this study can be applied in many ways. Perhaps most importantly, the findings can be used to reduce relational aggression in college students and ensure their positive adjustment to

college. For example, by introducing adaptive ways of coping with stress, positive conflict resolution strategies, and by making students aware of the existence and outcomes of relational aggression, student adjustment could be maximized.

Therefore, this study yielded many new findings of empirical significance. The findings introduce the relationship between stress and relational aggression, indicating that individuals experiencing fewer positive life events may be at increased risk for using relational aggression. This study also lends further support to research linking adjustment and relational aggression (e.g. Storch, Werner, & Storch, 2003). Additionally, analyses indicate a significant relationship between coping strategies and relational aggression that warrants further investigation. In light of the current findings, further research investigating the complex predictors of relational aggression is warranted.

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Table 1

Means and Standard Deviations for Psychological Control, Adjustment and Relationship Quality Measures (N=47-51)

Variable	*M*	*SD*
Parent-child relationship quality		
Trust	4.18	.66
Communication	3.71	.75
Alienation	3.70	.78
Peer relationship quality		
Trust	4.19	.73
Communication	3.81	.75
Alienation	3.50	.58
Psychological control		
Mother	10.88	3.33
Father	10.89	3.34
Adjustment		
Academic	5.75	1.11
Social	6.03	1.40
Personal-emotional	5.25	1.24
School satisfaction	6.87	1.87

Table 2

Means and Standard Deviations of Relational Aggression, Life Events and Coping Measures (N=47-51)

Variable	*M*	*SD*
Relational aggression	23.81	10.67
Life events		
Positive life events	60.38	19.06
Negative life events	31.21	12.28
Coping strategies		
Positive reinterpretation	11.24	2.66
Mental disengagement	9.24	2.27
Focus on, venting of emotions	9.72	3.19
Instrumental social support	10.47	2.93
Active coping	9.94	2.30
Denial	5.62	1.90
Religious coping	7.94	4.44
Humor	8.94	3.55
Behavioral disengagement	5.96	1.84
Restraint	8.32	2.47
Emotional social support	11.06	3.34
Substance use	5.43	3.03
Acceptance	10.80	2.28
Suppression of competing activities	8.00	2.08
Planning	10.57	3.10

Table 3

Intercorrelations among Coping Variables (N=50)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Pos. reint.	.12	-.11	.42**	.27	-.11	.31*	.24	-.21	.18	.17	-.58	.47**	.11	.46**
2. Mental dis.	--	.13	.22	.15	.13	.09	.35*	.31	.14	.01	.67	.25	.28	.92
3. Focus/vent		--	.44**	.21	.27	.15	-.11	.13	-.19	.56**	-.10	-.27	.11	-.12
4. Instru. sup			--	.54**	.11	.21	.11	-.10	.01	.61**	-.23	.38**	.20	.29
5. Active				--	-.22	.22	.02	-.17	.18	.32*	-.26	.15	.37**	.67**
6. Denial					--	.08	-.16	.54*	-.02	.10	.15	-.08	.10	-.17
7. Religious						--	-.01	-.01	.26	.36**	-.27	-.00	.04	.26
8. Humor							--	.07	.09	.23	-.15	.35*	-.10	.01
9. Beh. dis.								--	.24	.01	.32*	.05	.04	-.21
10. Restraint									--	.01	-.06	.33*	.45**	.30*
11. Em. supp.										--	-.31	.15	.13	.10
12. Substance											--	-.08	-.13	-.41
13. Accept												--	.16	.35*
14. Suppress													--	.47**
15. Planning														--

Note. $*p < .05$, $**p < .01$

Table 4

Intercorrelations among Adjustment Variables (N=51)

	2	3	4
1. Academic adjustment	.50**	.57**	.37**
2. Social adjustment	--	.49**	.56**
3. Personal-emotional adjustment		--	.25
4. School satisfaction			--

Note. ** $p < .01$

Table 5

Intercorrelations among Relationship Quality Variables (N=51)

	2	3	4	5	6
1. Parent trust	.74**	.77**	.14	.05	.43**
2. Parent communication	--	.70**	.25	.22	.36**
3. Parent alienation		--	.17	.06	.43**
4. Peer trust			--	.84**	.73**
5. Peer communication				--	.58**
6. Peer alienation					--

Note. ** $p < .01$

Table 6

Correlations between Parent-child Relationship Quality, Peer Relationship Quality and Psychological Control, and Relational Aggression (N=47-51)

Parent-child relationship quality	
Trust	.10
Communication	-.04
Alienation	-.28*
Peer relationship quality	
Trust	-.21
Communication	-.12
Alienation	-.20
Psychological control	
Mother	.33*
Father	-.02

Note. $*p < .05$

Table 7

Correlations between College Adjustment, Life Events and Coping Variables, and Relational Aggression (N=47-51)

Adjustment	
Academic	-.30*
Social	-.39**
Personal-emotional	-.15
School satisfaction	-.28*
Life events	
Positive	-.34*
Negative	.20
Coping	
Positive reinterpretation	-.28*
Mental disengagement	-.03
Focus on, venting of emotions	.26
Instrumental social support	.02
Active coping	-.04
Denial	.02
Religious coping	-.21
Humor	-.25
Behavioral disengagement	.01
Restraint	-.16
Emotional social support	-.00
Substance use	.22
Acceptance	-.34*
Suppression of activities	.04
Planning	-.40**

Note. *$p < .05$, ** $p < .01$

Table 8

Multiple Regression Analyses for College Adjustment Variables in Predicting Relational Aggression (N=50)

Predictor	*B*	*SE B*	*β*
Academic adjustment	-.72	.85	-.13
Social adjustment	-1.23	.76	-.28
School satisfaction	-.23	.54	-.07

Note. Model was significant, $R^2 = .172$, Adjusted $R^2 = .118$

Table 9

Multiple Regression Analyses for Coping Variables in Predicting Relational Aggression (N=50)

Predictor	*B*	*SE B*	*β*
Positive reinterpretation	-.13	.36	-.05
Acceptance	-.66	.40	-.24
Planning	-.56†	.29	-.29

Note. Model was significant, $R^2 = .232$, Adjusted $R^2 = .179$, $^{\dagger} p < .10$

Table 10

Multiple Regression Analyses for Coping Variables and Positive Life Events in Predicting Relational Aggression (N=50)

Predictor	*B*	*SE B*	*β*
Positive Life Events	-.06	.05	-.19
Positive Reinterpretation	-.09	.39	-.04
Acceptance	-.75†	.44	-.26
Planning	-.42	.33	-.21

Note. Model was significant, $R^2 = .270$, Adjusted $R^2 = .195$, $^{\dagger} p < .10$